Instructions

USPTO Procurement Checklist for Section 508 Compliance

This document is to assist the Requisitioner and the Office of Procurement in reviewing, processing, and documenting the award of EIT requirements to ensure compliance with Section 508. The first two pages explain how to complete and process the checklist and the required documentation. In addition, attached is supplemental information on the Section 508 standards and how to evaluate them.

Requisitioner – Individual who is funding and acquiring the EIT product (to include hardware, software, maintenance, and/or contract task orders).

Requisition Number – Assigned requisition number from POD working document.

Technical Person – Individual who provides technical support to the Requisitioner during the completion of the checklist, the procurement process, and the evaluation of the product. The Requisitioner and Technical person can be the same individual.

Program Office – Program office that initiated the requirement.

Reviewed by Accessibility Coordinator - Individual in each business area (e.g., Patents, Trademarks, CIO, and CFO) who is the Accessibility Coordinator. Before submission to the Office of Procurement, the checklist and documentation must be reviewed and initialed by the appropriate Accessibility Coordinator.

Brief Description of EIT – Provide description of the requested EIT item or service.

Exceptions Applies – Reference Page 3 in the attachment for a list on exceptions.

Exception does not Apply – Program office must identify which categories are applicable to the requirement. Only determine the applicable categories and not the standards within the category. The categories are divided into three Subparts B, C and D. If there are technical categories in subpart B that address your requirement, you do not need to look in subpart C. Subpart D (Information, Documentation and Support) will apply whenever documentation is part of the procurement (e.g., technical manuals).

Subpart B technical categories. For specific information on the categories and standards, reference the CIO home page or the USPTO Section 508 web-site. For an overview on the standards and a checklist for evaluating them, see the attachment.
- Software application and operating systems (pages 4-5 of the attachment)
- Web-Based Intranet and Internet Information applications (pages 6-9)
- Telecommunication Products (pages 10-11)
- Video and Multimedia Products (pages 12-13)
- Self-contained, closed Products (pages 14-15)
- Desktop and Portable computers (page 16)

Subpart C (Functional Performance Criteria) is outlined on page 17 of the attachment.

Subpart D (Information, Documentation) is outlined on page 17 of the attachment. This standard can be easily met by having the vendor provide information in both text and an electronic format (e.g., CD).

Market Analysis. After the technical standards have been identified, market research must be conducted to determine the commercial availability of the EIT. All market research must be conducted in accordance with FAR 10.001. Market research may include, but is not limited to, information from web-sites, industry publications, trade shows, CBD notices, and resources available from other Federal agencies. Attach the results of your market research.

It is important to note that a vendor must first meet your product's technical specifications. You only analyzing the Section 508 standards and compliance of those vendors who met your technical specifications.

Technical Evaluation. The requiring official and his or her designated technical person are responsible for ensuring that the product complies with the Section 508 standards. This phase is conducted in conjunction with the technical evaluation of proposals. As with any proposal evaluation, document your findings. Recommend that Section 508 compliance not be based on a vendor simply stating that they meet the standards. Instead, the vendor should provide *detailed* information on how they meet the standard, which ones they do not meet, and why certain standards are not applicable. There is an attached checklist for each category to help you evaluate the standards. Do not restrict responses just to the space provided on the checklist.

Requisitioner and Technical signatures and date. Required for certifying the completeness of the checklist.

Procedure for Processing a Procurement Request:

- Requisitioner and Technical Person complete section for their names, requisition number, program office and brief description of EIT product.
- If the Requisitioner and Technical Person determine if the product is an "Exception," they must:
  - Check the appropriate box
  - Provide the documentation and/or explanation
  - Sign and date the form
  - Have the Accessibility Coordinator review and initial the checklist.
  - Processes the procurement action.
- If the Requisitioner and Technical Person determine that the product is not an exception, they must
  - Determine which technical categories are applicable (Subparts B, C, D)
  - Check the appropriate boxes
  - Conduct market research and include results
  - Sign and date the form
  - Have the Accessibility Coordinator review and initial the checklist.
  - Processes the procurement action.
- Technically evaluate the product to determine that it meets technical requirements and section 508 standards

Following the format of the checklist:

Pre-Award Actions

Exceptions Applies

If you believe an exception to Section 508 exists, document the reasons. There is a list of EIT products which PTO considers to be "back office" equipment and therefore exempt from Section 508 compliance. Check with your Accessibility Coordinator if you believe your EIT product falls into this category. If it does, attach a copy of the back office list as your documentation for the procurement file.

Back Office Products
Any equipment located in areas frequented only by service personnel for maintenance, repair and occasional monitoring of equipment. The following items are considered to fit into the above "back-office" exception of Section 508:

- Servers and mainframe located in the data centers
- Terminals and consoles attached to the servers/mainframe
- Routers
- Switches
- Network-related equipment (behind the wall)
- PBX (telephone) server equipment
- Storage devices and related items (servers, tape backup system; components of a SAN; etc.)
- Equipment located in the ETC lab destined for the data center
- Software associated with the mainframe and servers which are located in areas not accessed by employees (except for monitoring, servicing and maintenance personnel) and members of the public (e.g., BRS®, Attachmate®, and Microsoft BackOffice®).

Note: just because equipment is located in the ETC lab or on the 11th floor data center, doesn't necessarily mean it is automatically exempt from §508. For example, stand-alone or network-attached PC's ordered off the DeskTop computer must be §508 compliant.

Fundamental Alteration

The law does not require a fundamental alteration in the nature of a product or its component. In other words, for a pager to be compliant would require a much larger device that would then not be portable, thus changing the fundamental nature of the product.

Exception does not Apply

Subpart B. Technical Standards

Software Applications and Operating Systems (1194.21)

Most of the specifications for software pertain to usability for people with vision impairments. For example, one standard requires alternative keyboard navigation, which is essential for people with vision impairments who cannot rely on pointing devices, such as a mouse.

Overview of Software Application and Operating Systems standards:

(a) *Keyboard.* Execute product functions from a keyboard, when software is designed to run on a system with a keyboard and the function or the result of performing the function can be discerned textually.
(b) *Compatibility.* Do not disrupt or disable activated accessibility features of other products, where those features developed and documented according to industry standards. Do not disrupt or disable activated accessibility features of any operating system, where application-programming interface for those features has been documented by the operating system manufacturer and is available to the product developer.
(c) *Visual focus indicators.* Provide well-defined and programmatically exposed visual focus indicator for interactive interface elements as input focus changes so assistive technology can track focus and focus changes.
(d) *User interface element.* Provide information to enable assistive technology to understand the identify, operation, and state of the element. When an image represents a program element, information conveyed by the image must also be available in text.
(e) *Bitmap images.* Must be assigned consistent meaning throughout application's performance when used to identify controls, status indicators, or other programmatic elements.
(f) *Textual information.* Provide textual information through operating system functions for displaying text, including text content, text input caret location, and text attributes.
(g) *Display aftributes.* Do not override user-selected contrast and color selections and other individual display attributes.
(h) *Animation.* Display information in at least one non-animated presentation mode at option of user when animation displayed.
(i) *Color coding.* Do not use color coding as only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
(j) *Color and contrast settings.* Provide variety of color selections capable of producing a range of contrast levels when a product permits a user to adjust color and contrast settings.
(k) *Flashing or blinking text.* Do not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 HZ and lower than 55 Hz.
(l) *Electronic forms.* Provide a format that allows access via assistive technology to information, field elements, and functionality required for completion and submission of the form, including directions and cues.

When evaluating your software application, be sure to test them under the same circumstances that employees or members of the public with disabilities would be using them. For instance, if you use software on a network environment, test the software on the same network, not in a stand-alone environment.

Do not restrict responses just to the space provided on the checklist.

Questions for Software and OS Accessibility	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a) If software is designed to run on a system that has a keyboard, are product functions executable from a keyboard where the function itself or the result of performing a function can be discerned textually?			
(b.i) Does the application avoid disrupting or disabling activated features of other products that are identified as accessibility features (where those features are developed and documented according to industry standards)?			
(b.ii) Does the application avoid disrupting or disabling activated features of any operating system that are identified as accessibility features (where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer)?			
(c.i) Is a well defined on-screen indication of the current focus (e.g., arrow showing where you are at) provided that moves among interactive interface elements as the input focus changes?			
(c.ii) Is the focus programmatically exposed so that assistive technology can track focus and focus changes?			
(d.i) Is there sufficient information about a user interface element (including the identity, operation and state of the element) available to assistive technology?			
(d.ii) If an image represents a program element, is the information conveyed by the image also available in text?			
(e) If bitmap images are used to identify controls, status indicators, or other programmatic elements, is the meaning assigned to those images consistent throughout an application's performance?			
(f) Is textual information provided through operating system functions for displaying text? (Minimum information that shall be made available is text content, text input caret location, and text attributes.)			
(g) Does the application avoid overriding user-selected contrast and color selections and other individual display attributes?			
(h) If animation is displayed, is information displayable in at least one non-animated presentation mode at the option of the user?			
(i) Does the application avoid using color-coding as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element?			
(j) If the product permits a user to adjust color and contrast settings, is a variety of color selections capable of producing a range of contrast levels provided?			
(k) Does the software avoid using flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz?			
(l) If electronic forms are used, does the form allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues?			

Web-based Intranet and Internet Information and Applications (1194.22)

The criteria for web-based technology and information are based on access guidelines developed by the Web Accessibility Initiative of the World Wide Web Consortium. Many of these provisions ensure access for people with vision impairments who rely on various assistive products to access computer-based information (e.g., screen readers) which translate what's on a computer screen into automated audible output, and refreshable Braille displays. Certain conventions, such as verbal tags or identification of graphics and format devices, like frames, are necessary so that these devices can "read" them for the user in a sensible way. The standards do not prohibit the use of web site graphics or animation. Instead, the standards aim to ensure that such information is also available in an accessible format. Generally, this means use of text labels or descriptors for graphics and certain format elements. (HTML code already provides an "Alt Text tag for graphics which can serve as a verbal descriptor for graphics). This section also addresses the usability of multimedia presentations, image maps, style sheets, scripting languages, applets and plug-ins, and electronic forms.

The standards apply to Federal web sites, but not to private sector web sites (unless a site is provided under contract to a Federal agency, in which case only that web site or portion covered by the contract would have to comply). Accessible sites offer significant advantages that go beyond access. For example, those with "text-only" options provide a faster downloading alternative and can facilitate transmission of web-based data to cell phones and personal digital assistants.

Overview of Web-based Intranet and Internet Information and Applications standards:

(a) *Text Equivalent.* Provide text equivalent for every non-text element (e.g., via "alt," "longdesc," or in element content.
(b) *Multimedia presentation.* Synchronize equivalent alternatives for multimedia presentation with presentation.
(c) *Color.* Design web pages so that all information conveyed with color is also available without color (e.g., from contrast or markup).
(d) *Organization.* Organize documents to be readable without requiring an associated style sheet.
(e) *Server-side image maps.* Provide redundant text links for each active region of server-side itnage maps.
(f) *Client-side image maps.* Provide client-side image maps instead. of server side image maps, except where regions cannot be defined with available geometric shape.
(g) *Data tables.* Identify row and column headers for data tables.
(h) *Multi-logic row or column headers.* Use markup to associate data cells and header cells for data tables with two or more logical levels of row or column headers.
(i) *Frames.* Title frames with text that facilitates identification and navigation.
(j) *Flicker.* Design pages to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
(k) *Text-only equivalent pages.* Provide text-only page, with equivalent information or functionality, to comply with standards when compliance cannot be accomplished in any other way. Update content of text-only page whenever primary page changes.

(l) *Scripting language.* Identify information provided by the script with functional text readable by assistive technology when pages utilize scripting languages to display content or to create interface elements.

(m) *Applets and plug-ins.* Provide a link to a plug-in or applet that complies with § 1194.21 (Software Applications and Operating Systems) when web page requires applet, plug-in, or other application to be present on the client system to interpret page content.

(n) *Electronic forms.* Provide a form that allows access via assistive technology to information, field elements, and functionality required for completion and submission of the form, including directions and cues.

(o) Content tracking. Provide method that permits users to skip repetitive navigation links.

(p) *Timed response.* Alert user when timed response is required and give sufficient time to indicate more time is required.

When evaluating software applications, be sure to test them under the same circumstances that employees or members of the public with disabilities would be using them. For instance, if you use off-the-shelf software on a network environment, test the software on the same network, not in a stand-alone environment.

Do not restrict responses just to the space provided on the checklist.

Questions for Web Applet and Plug-In	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a) If the software is designed to run on a system that has a keyboard, are product functions executable from a keyboard where the function itself or the result of performing a function can be discerned textually?			
(b.i) Does the application avoid disrupting or disabling activated features of other products that are identified as accessibility features (where those features are developed and documented according to industry standards)?			
(b.ii) Does the application avoid disrupting or disabling activated features of any operating system that are identified as accessibility features (where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer)?			
(c.i) Is a well defined on-screen indication of the current focus (e.g., pointing arrow) provided that moves among interactive interface elements as the input focus changes?			
(c.ii) Is the focus programmatically exposed so that assistive technology can track focus and focus changes?			
(d.i) Is there sufficient information about a user interface element (including the identity, operation and state of the element) available to assistive technology?			
(d.ii) If an image represents a program element, is the information conveyed by the image also available in text?			
(e) If bitmap images are used to identify controls, status indicators, or other programmatic elements, is the meaning assigned to those images consistent throughout an application's performance?			
(f) Is textual information provided through operating system functions for displaying text? (The minimum information that shall be made available is text content, text input caret location, and text attributes.)			
(g) Does the application avoid overriding user-selected contrast and color selections and other individual display attributes?			
(h) If animation is displayed, is information displayable in at least one non-animated presentation mode at the option of the user?			
(i) Does the application avoid using color-coding as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element?			
(j) If the product permits a user to adjust color and contrast settings, is a variety of color selections capable of producing a range of contrast levels provided?			
(k) Does the software avoid using flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz?			
(l) If electronic forms are used, does the form allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues?			

When evaluating your web sites, be sure to test them under the same circumstances that employees or members of the public with disabilities would be using them.

Do not restrict responses just to the space provided on the checklist.

Questions for Web Site Accessibility	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a) Is there a text equivalent (e.g., via "alt", "longdesc", or in element content) for every non-text element?			
(b) For any multimedia presentations, are there equivalent alternatives and are they synchronized with the presentation?			
(c) Is all information conveyed with color also available without color (e.g. from context or markup)?			
(d) Are documents organized so they are readable without requiring an associated style sheet?			
(e) Are redundant text links provided for each active region of a server-side image map?			
(f) Are client-side image maps provided, instead of server-side image maps (except where the regions cannot be defined with an available geometric shape)?			
(g) Are row and column headers identified for data tables?			
(h) Is markup used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers?			
(i) Are frames titled with text that facilitates frame identification and navigation?			
(j) Are pages designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz?			
(k.i) Is a text-only page, with equivalent information or functionality, provided? (This is to ensure that a web site complies when compliance cannot be accomplished in any other way.)			
(k.ii) Is the content of the text-only page updated whenever the primary page changes?			
(l) If pages use scripting languages to display content, or to create interface elements, is the information provided by the script identified with functional text that can be read by assistive technology?			
(m) If a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, does the page provide a link to a plug-in or applet that complies with §1194.21, the Technical Standards for Software Applications and Operating Systems, (a) through (l)?			
(n) If electronic forms are designed to be completed on-line, does the form allow people using assistive technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues?			
(o) Is a method provided that permits users to skip repetitive navigation links?			
(p) If a timed response is required, is the user alerted and given sufficient time to indicate more time is required?			

Telecommunications Products (1194.23)

This criteria is to ensure access to people who are deaf or hard of hearing. It includes compatibility with hearing aids, assistive listening devices, and TTYs (devices that enable people with hearing or speech impairments to communicate over the telephone).

Overview on Telecommunications Products standards:

(a) *Non-acoustic connection point for TTY's.* Provide standard non-acoustic connection point for TTY's for telecommunications products or systems that allow voice communication and do not have a TTY functionality. Microphones must be capable of being turned on and off to allow user to intermix speech with TTY use.

(b) *TTY signs.* Support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols when telecommunication products include voice communication functionality.

(c) *TTY compatibility with voice response systems.* Make voice mail, auto-aftendant, and interactive voice response telecommunications systems usable with TTY's.

(d) *Timed response.* Give an alert that time interval is about to run out when voice mail, messaging, auto-aftendant, and interactive voice response telecommunications systems require a response from user within a time interval, and provide sufficient time for user to indicate that more time is required.

(e) *Caller Identification.* Make caller identification and similar functions available for TTY users and users who cannot see displays where caller identification is provided.

(f) *Volume control.* Provide a gain adjustable up to a minimum of 20 dB for transmitted voice signals, and at least one intermediate step of 12 dB of gain for incremental volume control.

(g) *Default volume level reset.* Provide a function to automatically reset the volume to the default level after every use if the telecommunications product allows user to adjust the receive volume.

(h) *Audio transducer.* Provide a means for effective magnetic wireless coupling to hearing technologies where telecommunications product delivers output by audio transducer normally held up to the ear.

(i) *Interference reduction.* Reduce interference to hearing technologies (e.g., hearing aids, cochlear implants, assistive listening systems) to the lowest possible level that allows user of hearing technologies to utilize the telecommunications product.

(j) *Pass through standard codes.* Pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats, or other information necessary to provide information in usable format in products that transmit or conduct information or communication. Do not remove information needed for access or restore it upon delivery when technologies use encoding, signal compression, format transformation, or similar techniques.

(k) *Mechanically operated controls.* Provide controls and keys that are tactilely discernable without activating the controls or keys, and that are operable with one hand and do not require tight grasping, pinching, or twisting of the wrist. Force to activate controls or keys must be 5 lbs. (22.2 N) maximum. If key repeat is supported, delay before repeat must be adjustable to at least 2 seconds and key repeat rate must be adjustable to 2 seconds per character. Status of all locking or toggle controls or keys must be visually discernable, and discernable through touch or sound.

Do not restrict responses just to the space provided on the checklist.

Questions for Telecommunications Accessibility	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a.i) Does telecommunications product/ system (which provides functions allowing voice communication but which does not itself provide a TTY functionality) provide a standard non-acoustic connection point for TTYs?			
(a.ii) Are any microphones capable of being turned on and off to allow the user to intermix speech with TTY use?			
(b) Do telecommunications products (which includes voice communication functionality) support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols?			
(c) Are voice mail, auto-attendant, and interactive voice response telecommunications systems usable by TTY users with their TTYs?			
(d.i) Do voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems (that require a response from a user within a time interval) give an alert when the time interval is about to run out?			
(d.ii) Do voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems (that require a response from a user within a time interval) provide sufficient time for the user to indicate that more time is required?			
(e) If provided, are caller identification and similar tele-communications functions also available for users of TTYs and for users who cannot see displays?			
(f.i) For transmitted voice signals, do telecommunications products provide a gain adjustable up to a minimum of 20 dB?			
(f.ii) For incremental volume control, is at least one intermediate step of 12 dB of gain provided?			
(g) If telecommunications product allows a user to adjust the receive volume, is there a function provided to automatically reset the volume to the default level after every use?			
(h) If telecommunications product delivers output by an audio transducer which is normally held up to the ear, is there a means provided for effective magnetic wireless coupling to hearing technologies?			
(i) Is interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) reduced to lowest possible level that allows a user of hearing technologies to use the telecommunications product?			
(j.i) Have products that transmit or conduct information or communication, been passed through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format?			
(j.ii) Have technologies which use encoding, signal compression, format transformation, or similar techniques not removed information needed for access or have the capability to restore it upon delivery?			
(k)(1) If product has mechanically operated controls or keys, are controls and keys tactilely discernible without activating the controls or keys?			
(k)(2.i) If the product has mechanically operated controls or keys, are controls and keys operable with one hand and do not require tight grasping, pinching, or twisting of the wrist?			
(k)(2.ii) If product has mechanically operated controls or keys, is force required to activate controls/keys 5 lbs. (22.2 N) maximum?			
(k)(3.i) If the product has mechanically operated controls or keys, and key repeat is supported, is the delay before repeat adjustable to at least 2 seconds?			
(k)(3.ii) If the product has mechanically operated controls or keys, and key repeat is supported, is the repeat rate adjustable to 2 seconds per character?			
(k)(4) If product has mechanically operated controls or keys, is the status of all locking or toggle controls or keys visually discernible, and discernible either through touch or sound?			

Video or Multimedia Products (1194.24)

Multimedia products include, but are not limited to, video programs, narrated slide production, and computer generated presentations. Provisions address caption decoder circuitry (for any system with a screen larger than 13 inches) and secondary audio channels for television tuners, including tuner cards for use in computers. The standards also require captioning and audio description for certain training and informational multimedia productions developed or procured by Federal agencies.

Overview on Video or Multimedia Products standards:

(a) *Television displays.* Equip analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry must be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.
(b) *Television tuners.* Equip television tuners, including tuner cards for use in computers, with secondary audio program playback circuitry.
(c) *Captioning.* Provide open or closed captions on all training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio necessary for comprehension of content.
(d) *Audio description.* Provide audio description for all training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for comprehension of content.
(e) *User control.* Make display or presentation of alternate text presentation or audio descriptions user-selectable unless permanent.

When evaluating your video and multimedia, be sure to test them under the same circumstances that employees or members of the public with disabilities would be using them.

Do not restrict responses just to the space provided on the checklist.

Questions for Video and Multimedia	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a.i) Are all analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals?			
(a.ii) Are widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals? (This checkpoint might not be applicable until July 1, 2002.)			
(b) Are television tuners, including tuner cards for use in computers, equipped with secondary audio program playback circuitry?			
(c) Are all training and informational video and multimedia productions (which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content) open or closed captioned?			
(d) Are all training and informational video and multimedia productions (which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content) audio described?			
(e) Is the display or presentation of alternate text presentation or audio descriptions user-selectable unless permanent?			

Self Contained, Closed Products (1194.25)

This section covers products that generally have imbedded software but are often designed in such a way that a user cannot easily attach or install assistive technology. Examples include information kiosks, information transaction machines, copiers, printers, calculators, fax machines, and similar types of products. The standards require that access features be built into the system so users do not have to attach an assistive device to it. Other specifications address mechanisms for private listening (handset or a standard headphone jack), touchscreens, auditory output and adjustable volume controls, and location of controls in accessible reach ranges.

Overview on Self Contained, Closed Products standards:

(a) *Usability.* Make self-contained products usable by people with disabilities without attaching assistive technology. Personal headsets for private listening are not assistive technology.
(b) *Timed response.* Alert user when timed response is required and give sufficient time to indicate more time is required.
(c) *Voice output.* Provide input method that complies with § 1194.23-(k) (1) through (4) where product utilizes touch screens or contact-sensitive controls.
(d) *Biometric identification.* Provide alternative form of identif ication or activation, which does not require user to possess particular biological characteristics when biometric forms of user identification or control are used.
(e) *Auditory output.* Provide audio signal at a standard signal level through an industry standard connector that will allow for private listening when products provide auditory output. Provide ability to interrupt, pause, and restart audio at any time.
(f) *Volume control.* Provide incremental volume control with output amplification up to a level of 65 dB when products deliver voice output in a public area. Where ambient noise level is above 45 dB, volume gain of at least 20 dB above the ambient level must be user selectable. Provide function to automatically reset volume to default level after every use.
(g) *Color coding.* Do not use color coding as only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
(h) *Color and contrast.* Provide a range of color selections capable of producing a variety of contrast levels when a product permits user to adjust color and contrast settings.
(i) *Flicker.* Design products to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.
(j) *Reach ranges.* Make operable controls comply with reach ranges in § 1194.25 0) (1) through (4) when products have operable controls and are free-standing, non-portable, and intended to be used in one location.

Do not restrict responses just to the space provided on the checklist.

Questions for Self Contained, Closed Products	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a) Are products usable by people with disabilities without requiring them to attach assistive technology to product? (Personal headsets for private listening are not assistive technology.)			
(b) If a timed response is required, is the user alerted and given sufficient time to indicate more time is required?			
(c)(1) If product uses touchscreens or contact-sensitive controls, are controls/keys tactilely discernible without activating controls or keys?			
(c)(2.i) If the product utilizes touchscreens or contact-sensitive controls, are controls and keys operable with one hand and do not require tight grasping, pinching, or twisting of the wrist?			
(c)(2.ii) If product uses touchscreens or contact-sensitive controls, is force required to activate controls and keys 5 lbs. (22.2 N) maximum?			
(c)(3.i) If product uses touchscreens or contact-sensitive controls, and key repeat is supported, is the delay before repeat adjustable to at least 2 seconds?			
(c)(3.ii) If product uses touchscreens or contact-sensitive controls, and key repeat is supported, is repeat rate adjustable to 2 seconds per character?			
(c)(4) If product uses touchscreens or contact-sensitive controls, is status of all locking or toggle controls or keys visually discernible, and discernible either through touch or sound?			
(d) If biometric forms of user identification or control are used, is an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, provided?			
(e.i) If products provide auditory output, is the audio signal provided at a standard signal level through an industry standard connector that will allow for private listening?			
(e.ii) If products provide auditory output, does the product provide the ability to interrupt, pause, and restart the audio at any time?			
(f.i) If the product delivers voice output in a public area, is incremental volume control provided with output amplification up to a level of at least 65 dB?			
(f.ii) If the product delivers voice output in a public area, and the ambient noise level of the environment is above 45 dB, is a volume gain of at least 20 dB above the ambient level user selectable?			
(f.iii) If the product delivers voice output in a public area, is there a function provided to automatically reset the volume to the default level after every use?			
(g) Are other of means besides color coding used to conveying information, indicating an action, prompting a response, or distinguishing a visual element?			
(h) If a product permits a user to adjust color and contrast settings, is a range of color selections capable of producing a variety of contrast levels provided?			
(i) Is the product designed to avoid screen flickering with a frequency greater than 2 Hz and lower than 55 Hz?			
(j)(1) If the product is freestanding, non-portable, and intended to be used in one location, and has operable controls, is the position of any operable control (determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product) within the 48 inch length?			
(j)(2) If product is freestanding, non-portable, and intended to be used in one location, and has any operable controls that is 10 inches or less behind the reference plane, is the height 54 inches maximum and 15 inches minimum above the floor?			
(j)(3) If the product is freestanding, non-portable, and intended to be used in one location, and has operable controls (where any operable control is more than 10 inches and not more than 24 inches behind the reference plane) is the height 46 inches maximum and 15 inches minimum above the floor?			
(j)(4) If the product is freestanding, non-portable, and intended to be used in one location, and has operable controls, are operable controls within 24 inches behind the reference plane?			

Desktop and Portable Computers (1194.26)

This section focuses on keyboards and other mechanically operated controls, touch screens, use of biometric form of identification, and ports and connectors.

Overview on Desktop and Portable Computers standards:

(a) *Vision.* Provide mechanically operated controls and keys that comply with § 1194.23 (k) (1) through (4).
(b) *Touch screens.* Provide input method that complies with § 1194.23 (k) (1) through (4) if product utilizes touch screens or touch operated controls.
(c) *Biometric identification.* Provide alternative form of identification or activation, which does not require user to possess particular biological characteristics when biometric forms of user identification or control are used.
(d) *Expansion joints.* Make at least one of each type of expansion slots, ports and connectors provided comply with publically available industry standards.

When evaluating your desktops and portable computers, be sure to test them under the same circumstances that employees or members of the public with disabilities would be using them.

Do not restrict responses just to the space provided on the checklist.

Questions for Desk Tops and Portable Computers	Meet Standard and How	Do Not Meet Standard	Not Applicable and Why
(a)(1) Are all mechanically operated controls and keys tactilely discernible without activating the controls or keys?			
(a)(2.i) Are all mechanically operated controls and keys operable with one hand and do not require tight grasping, pinching, or twisting of the wrist?			
(a)(2.ii) Is the force required to activate controls and keys 5 lbs. (22.2 N) maximum?			
(a)(3.i) If key repeat is supported, is the delay before repeat adjustable to at least 2 seconds?			
(a)(3.ii) If key repeat is supported, is the repeat rate adjustable to 2 seconds per character?			
(a)(4) Is the status of all locking or toggle controls or keys visually discernible, and discernible either through touch or sound?			
(b)(2.ii) If the product uses touchscreens or touch-operated controls, is the force required to activate controls and keys 5 lbs. (22.2 N) maximum?			
(b)(3.i) If the product uses touchscreens or touch-operated controls, and key repeat is supported, is the delay before repeat adjustable to at least 2 seconds?			
(b)(3.ii) If the product uses touchscreens or touch-operated controls, and key repeat is supported, is the repeat rate adjustable to 2 seconds per character?			
(b)(4) If the product uses touchscreens or touch-operated controls, is the status of all locking or toggle controls or keys visually discernible, and discernible either through touch or sound?			
(c) If biometric forms of user identification or control are used, is there an alternative form of identification or activation, which does not require the user to possess particular biological characteristics?			
(d) If provided, is at least one of each type of expansion slots, ports and connectors compliant with publicly available industry standards?			

Subpart C. Functional Performance Criteria

The performance requirements of this section are intended for overall product evaluation and for technologies or components for which there is no specific requirement under the technical standards in Subpart B. These criteria are designed to ensure that the individual accessible components work together to create an accessible product. They cover operation, including input and control functions, operation of mechanical mechanisms, and access to visual and audible information.

Overview on Functional Performance Criterias:

(a) *Vision.* Provide at least one mode of operation and information retrieval that does not require user vision, or support for assistive technology.
(b) *Visual acuity.* Provide audio output and enlarged print output working together or independently at least one mode of operation and information retrieval that does not require visual acuity above 20/70, or support for assistive technology.
(c) *Hearing.* Provide at least one mode of operation and information retrieval that does not require hearing, or support for assistive technology.
(d) *Audio information.* Provide at least one mode of operation and information retrieval in enhanced auditory fashion where audio information is important for use of a product, or support for assistive technology
(e) *Speech.* Provide at least one mode of operation and infon-nation retrieval that does not require speech, or support for assistive technology.
(f) *Motor skills/ coordination.* Provide at least one mode of operation and information retrieval that does not require fine-motor control or simultaneous actions and that is operable with limited reach and strength.

Subpart D. Information, Documentation, and Support Documentation Requirements.

The standards also address access to all information, documentation, and support provided to end users of covered technologies. This includes user guides, installation guides for end-user installable devices, and customer support and technical support communications. Such information must be available in alternate formats upon request at no additional charge. Alternate formats or methods of communication, can include Braille, large print, electronic text, TTY access, and captioning and audio description for video materials. However, the easiest solution for this requirement is to have the vendor provide the USPTO the information in an electronic format (e.g., CD). It is not acceptable that information is available on the vendor's web-site.

(a) *Product support documentation.* Make product support documentation provided to end-users available in alternate formats upon request for no additional charge.
(b) *Accessibility and compatibility features.* Provide end-users access to a description of accessibility and compatibility features of products in alternate formats or alternate modes upon request at no additional charge.
(c) *Support services.* Accommodate communication needs of end users with disabilities when providing support services for products.